

**WHAT IS CLAIMED IS:**

- 1 1. A customer self-checkout system for processing items for purchase, comprising:  
2 a checkout station configured for self-checkout by customers of items for purchase;  
3 a plurality of supervisory terminals configured to conduct supervisory activities  
4 administering operation of the checkout station; and  
5 a controller operatively coupling the plurality of supervisory terminals to the checkout  
6 station, wherein said controller is configured to enable administration of the checkout  
7 station by multiple ones of the supervisory terminals.
- 8 2. The system of claim 1, wherein:  
9 the checkout station is one of a plurality of checkout stations;  
10 the controller is one of a plurality of controllers;  
11 each of the plurality of controllers is associated with a corresponding one of the plurality  
12 of checkout stations; and  
13 each of the controllers is operatively coupled to the plurality of supervisory terminals.
- 14 3. The system of claim 1, wherein:  
15 the checkout station is one of a plurality of checkout stations;  
16 the controller is operatively coupled to each of the plurality of checkout stations; and  
17 the controller is configured to administer control of the plurality of checkout stations by  
18 multiple ones of the plurality of supervisory terminals.

19 4. The system of claim 1, wherein:

20 a first one of the supervisory terminals is operatively coupled to the controller by a

21 wireless data network; and

22 the supervisory terminal and the checkout station are operatively coupled to each other by

23 a wired data network.

24 5. The system of claim 4, wherein a second one of the supervisory terminals is operatively

25 coupled to the controller by a wired data network.

26 6. The system of claim 4, wherein the first supervisory terminal is a battery operated mobile

27 supervisory device.

28 7. The system of claim 6, wherein the first supervisory terminal is pager-size supervisory

29 device.

30 8. The system of claim 7, wherein the pager-size supervisory device comprises a vibrating

31 indication device.

32 9. The system of claim 1, wherein a first one of the supervisory terminals comprises a card

33 reader configured to clear a weight violation at the checkout station in response to a

34 reading of an authorization card.

35 10. The system of claim 9, wherein the authorization card comprises a transponder card.

36 11. The system of claim 9, wherein:

37 the checkout station is one of a plurality of checkout stations; and

38 the first supervisory terminal is dedicated to conducting supervisory activities over a first

39 one of the plurality of checkout stations.

40 12. The system of claim 1, wherein:

41 the supervisory activities comprise a plurality of supervisory functions that can be

42 performed to administer operation of the checkout station;

43 a first one of the supervisory terminals can conduct supervisory activities consisting of a

44 first subset of the supervisory functions;

45 a second one of the supervisory terminals can conduct supervisory activities consisting of

46 a second subset of the supervisory functions; and,

47 the first and second subsets of the supervisory functions are different.

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49 13. The system of claim 12, wherein:

50 at least one of the plurality of supervisory functions is common to the first and second

51 subsets of the supervisory activities.

14. A method for providing supervisory support in a customer self-checkout system,  
comprising:  
monitoring operation of a checkout station;  
detecting a request for supervisory activity at the checkout station;  
transmitting the request for supervisory activity to a plurality of supervisory stations;  
coordinating communication between the self-checkout station and the plurality of  
supervisory stations to enable a responding supervisory station to assert control over  
the checkout station.

15. The method of claim 14, wherein:

the supervisory activity comprises a plurality of supervisory functions that can be  
performed to administer operation of the checkout station;

a first one of the supervisory stations can conduct supervisory activities consisting of  
a first subset of the supervisory functions;

a second one of the supervisory stations can conduct a second subset of the  
supervisory functions; and,

the first and second subsets of the supervisory functions are different.

16. The method of claim 15, wherein:

at least one of the plurality of supervisory functions is common to the first and second  
subsets of the supervisory functions.

73 17. The method of claim 14, wherein coordinating communication comprises:

74 receiving at a communications controller a first response from a first one of the  
75 supervisory stations and a second response from a second one of the supervisory  
76 stations;  
77 enabling control over the checkout station in accordance with the first response; and  
78 rejecting the second response.

79 18. The method of claim 14, wherein coordinating communication comprises:

80 receiving at a communications controller a response from a first one of the supervisory  
81 stations;  
82 enabling control over the checkout station in accordance with the first response; and  
83 transmitting a message from the communication controller to non-responding ones of the  
84 supervisory stations to cancel supervisory request outstanding at each of said non-  
85 responding supervisory stations.

86 19. A method of processing input at a supervisory terminal in a self-checkout system using a

87 handheld supervisory device, the method comprising:

88 receiving a supervisory request at a handheld supervisory device, the supervisory request  
89 indicating assistance required at a checkout station;

90 processing the supervisory request to determine a sequence of input steps associated with  
91 receipt of input responsive to the supervisory request, where the sequence of input  
92 steps differs depending on content of the received supervisory request and on inputs  
93 entered at the supervisory device as said steps are processed;

94 displaying context-sensitive input displays on a supervisory device display; and  
95 altering the displayed information in response to data entry at the supervisory device.

96 20. The method of claim 19, wherein displaying context-sensitive input prompts on a  
97 supervisory device display and altering the displayed information in response to data  
98 entry comprises:  
99 displaying information indicating data input required by a checkout station;  
100 monitoring data input to detect entry of response data, a void input, a clear input, a cancel  
101 input, or an enter input; and  
102 when a void input is received, displaying a prompt requesting input of response data  
103 relating to an item to void;  
104 when a clear input is received, clearing a previously received response data input;  
105 when a cancel input is received, terminating the monitoring;  
106 when an enter input is received, determining whether received response data is valid and  
107 if the response data is valid, transmitting the response data to a checkout station.

108 21. The method of claim 20, wherein monitoring data input further comprises detecting entry  
109 of bar code information and, when said bar code information is detected, determining  
110 whether the bar code information comprises valid response data.